

What is claimed is:

1. A method for enhancing blood flow in a body part of a patient, the method comprising:
 - inserting the body part through a port in a hypobaric chamber;
 - 5 forming a non-occlusive seal at the port around the body part so that the seal does not contact the body part;
 - creating a mild negative pressure within the chamber relative to an ambient pressure; and
 - 10 exposing the body part to the mild negative pressure for a pre-determined period.
2. The method of claim 1, wherein the non-occlusive seal comprises an adjustable iris comprising a pliable elastic material having an outer edge and a center opening with a center edge, wherein the outer edge is attached to the port and a plurality of radially-adjustable slides is attached to the center edge so that the pliable elastic material is stretched between the port and the slides.
3. The method of claim 2, wherein the pliable elastic material is latex or a similar rubber-like material.
4. The method of claim 2, wherein each of the plurality of slides includes means for locking the slide in place after adjustment.
5. The method of claim 1, wherein the mild negative pressure is less than 50 mmHg.
6. The method of claim 5, wherein the mild negative pressure is within the range of -10 to -20 mmHg.
7. The method of claim 1, wherein the body part is a foot or lower leg.
8. The method of claim 7, wherein the patient is diabetic.

9. The method of claim 1, wherein the body part is a hand or forearm.
10. The method of claim 1, wherein the pre-determined period comprises a
5 pre determined length of time.
11. The method of claim 1, wherein the pre-determined period comprises a
length of time required to reach a pre-determined value of a parameter.
- 10 12. A device for enhancing blood flow in a body part of a patient, the
device comprising:
a hypobaric chamber;
a port formed in the chamber through which the body part may be inserted into
the chamber;
15 an adjustable aperture disposed within the port for encircling the body part at
the point of entry into the chamber to create a non-occlusive seal;
a vacuum source for generating a mild negative pressure within the chamber;
and
vacuum tubing for connecting the vacuum source to the chamber.
- 20 13. The device as in claim 12, wherein the adjustable aperture comprises
an iris comprising a pliable elastic material having an outer edge and a center opening
with a center edge, wherein the outer edge is attached to the port and a plurality of
radially-adjustable slides is attached to the center edge so that the pliable elastic
25 material is stretched between the port and the slides.
14. The device as in claim 13, wherein the pliable material is latex or
rubber-like material.
- 30 15. The device as in claim 12, wherein the mild negative pressure is less
than ambient pressure and higher than -50 mmHg.

16. The device as in claim 15, wherein the mild negative pressure is in the range of -10 to -20 mmHg.

17. A method for treatment of impaired microcirculation in a diabetic
5 patient, the method comprising:
inserting an affected limb through a port in a hypobaric chamber;
adjusting a non-occlusive seal around the limb;
creating a mild negative pressure within the chamber relative to ambient,
wherein the mild negative pressure is less than -50 mmHg; and
10 exposing the limb to the mild negative pressure for a pre-determined period.

18. The method of claim 17, wherein the non-occlusive seal comprises an iris comprising a pliable elastic material having an outer edge and a center opening with a center edge, wherein the outer edge is attached to the port and a plurality of
15 radially-adjustable slides is attached to the center edge so that the pliable elastic material is stretched between the port and the slides.

19. The method of claim 17, wherein the mild negative pressure is -10
mmHg.
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20. The method of claim 17, wherein the affected limb is a lower leg and the non-occlusive seal is disposed around the patient's upper calf.

21. The method of claim 17, wherein the pre-determined period comprises
25 a pre-determined length of time.

22. The method of claim 17, wherein the pre-determined period comprises a length of time required to reach a pre-determined value of a parameter.